APPENDIX C

(CLEAN VERSION OF ALL PENDING CLAIMS)

(Serial No. 09/889,705)

CLAIMS

What is claimed is:

1. A sensor for detecting a fluid level in a container, the sensor comprising first and second electrodes arranged such that a majority of their areas are vertically and horizontally offset from each other.

2. The sensor of claim 1, wherein the first and second electrodes are arranged such that their areas are substantially vertically and horizontally offset from each other.

3. The sensor of claim 1, wherein the first and second electrodes are arranged such that their areas are completely vertically and horizontally offset from each other.

4. The sensor of claim 1, wherein the first and second electrodes are vertically spaced from each other.

5. The sensor of claim 1, wherein the electrodes comprise substantially two-dimensional plates.

6. The sensor of claim 1, further comprising a conductor coupled to each of the first and second electrodes.

7. The sensor of claim 6, wherein the conductors coupled to each of the first and second electrodes are also coupled to control circuitry.

8. (Amended) The sensor of claim 7, wherein the conductors coupled to each of the first and second electrodes are coupled to the control circuitry through a Zero Insertion Force connector.

9. (Amended) The sensor of claim 1, further comprising control circuitry, the control circuitry configured to supply an oscillating signal having a frequency greater than 1 MHz to one of the first and second electrodes.

10. (Amended) The sensor of claim 9, wherein the control circuitry is configured to supply a signal at a frequency of at least about 4 MHz.

11. (Amended) The sensor of claim 10, wherein the control circuitry is configured to supply a signal at a frequency of at least about 8 MHz.

12. The sensor of claim 1, further comprising control circuitry configured to detect a change in a capacitance of the sensor.

13. The sensor of claim 1, further comprising at least one alarm responsive to an output signal of the sensor.

14. The sensor of claim 1, wherein the electrodes are horizontally spaced.

15. The sensor of claim 1, wherein the first and second electrodes are isolated from a volume within the container.

16. The sensor of claim 15, wherein the first and second electrodes are placed on a wall of the container.

17. The sensor of claim 16, further comprising a mounting structure to which the first and second electrodes are affixed.

18. (Amended) The sensor of claim 17, wherein the mounting structure is a thin, electrically insulative film.

19. (Amended) The sensor of claim 18, wherein the thin, electrically insulative film is Mylar.

20. The sensor of claim 15, wherein the electrodes are placed within the wall of the container.

21. (Amended) A method for detecting a level of a fluid within a container, comprising:

placing a capacitive structure including first and second electrodes arranged such that a majority of their areas are vertically and horizontally offset from each other on a wall of the container;

driving the capacitive structure at a frequency of more than about 1 MHz and generating an output signal from the capacitive structure responsive thereto;

adjusting a fluid level within the container; and

detecting a change in the output signal responsive to the adjusting of the fluid level.

22. The method of claim 21, wherein placing a capacitive structure on a wall of the container comprises placing a capacitive structure within the wall of the container.

23. The method of claim 21, wherein driving the capacitive structure at a frequency of more than about 1 MHz further comprises driving the capacitive structure at a frequency of at least about 4 MHz.

24. (Amended) The method of claim 21, wherein driving the capacitive structure at a frequency of more than about 1 MHz further comprises driving the capacitive structure at a frequency of at least about 8 MHz.

25. The method of claim 21, wherein placing the capacitive structure on a wall of the container comprises forming the capacitive structure on a mounting structure and affixing the mounting structure to an exterior wall of the container with adhesive.

26. The method of claim 21, wherein placing the capacitive structure on a wall of the container comprises forming the capacitive structure on the wall.

27. The sensor of claim 21, further comprising determining whether the output signal exceeds a reference signal.

28. (Amended) The method of claim 27, further comprising initiating at least one alarm if the output signal exceeds the reference signal.

29. The method of claim 28, wherein the at least one alarm is at least one of an audible alarm and a visual alarm.